

Title : Abdomen the PANDORA BOX Luteal cyst rupture-an emergency

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INTRODUCTION :

Acute pelvic pain in women of childbearing age is a common and frequent cause for admission to emergency room (ER), necessitating emergent medical evaluation especially when it is due to haemoperitonium^[1].

In this scenario, the wide range of differential diagnoses that must be considered when assessing abdominal pain represents an issue for the clinical approach. Sometimes it can be difficult to distinguish gynecological from gastrointestinal and urinary tract emergencies because of overlapping symptoms and signs. Various imaging modalities in association with clinical findings play an important role in the characterization of the cause of pain^[2,3]. Early diagnosis is necessary to preserve the reproductive systems and the life of the patient in severe cases. Hemoperitoneum may occur in the context of various gynecological emergencies; in some cases it could be a complication of a ruptured hemorrhagic corpus luteum^[3-5].

KEY WORDS:

Ovary, Luteal cyst, Ectopic pregnancy, Emergency-Laparotomy,

CASE REPORT :

27year female P3L3 with TL done came with c/o Syncope attacks since 3 days, Breathlessness and giddiness since 3 day, Nausea and vomiting since 2 days, Pain in abdomen since 1 day

On examination she had Pulse 114bpm BP: 100/56 mm Hg ,Pallor (++++)

Tenderness on deep palpation present over the Right Iliac fossa. Dull note heard on percussion, Shifting dullness (+) Bimanual Examination did not have any positive findings

Patient had been investigated and found to have severe anaemia with thrombocytopenia (Hb: 4.8gm%, platelets: 31000)

USG report suggested to have Heterogeneous lesion noted in the Right ovary showing peripheral vascularises. Left ovary normal. Moderate amount of free fluid in POD and Pelvis (haemoperitonium). Mild Splenomegaly.

Paracentesis : presence of non clotting blood present.

MANAGEMENT:

As an emergency abdomen was opened and bleeding source was identified and CYSTECTOMY done.

Intra-operative findings : massive haemoperitonium About 1500ml of blood present. Right sided ovary enlarged congested, enlarged in size and bleeding site over the ovary surface. Right sided fallopian tube was normal. Left sided fallopian tube and ovary were normal.

DISCUSSION : Spontaneous haemoperitonium may occur in various gynecological emergencies. The most common gynecological causes of spontaneous haemoperitonium in women of childbearing age are ectopic pregnancy and ruptured corpus luteal cyst. Corpus luteum is a functional cyst developing in the luteal phase of the ovarian cycle which regresses spontaneously in corpus albicans when pregnancy does not occur^[6]. Being a thin walled vascular structure corpus luteum is prone to hemorrhage even if bleeding is usually contained inside the cyst .Corpus luteum cyst-wall rupture is a rare complication that occurs most frequently in women in their reproductive age but it is relatively uncommon in early adolescence^[6, 7]. When bleeding occurs, hemorrhage may spread into the peritoneal cavity causing haemoperitonium . The diagnosis of ruptured corpus luteal cyst is based on a high historical suspicion (the patient generally is in the luteal phase of the ovarian cycle), clinical features, and laboratory tests. The latter often show anemia, raised CRP, and mild leukocytosis. The evaluation of serum β -hCG levels is necessary to differentiate ruptured corpus luteal cyst from ruptured ectopic pregnancy, which may have a similar presentation^[4,8]. A persistent corpus luteum may be associated with delayed menstrual cycle. Occurrence of a corpus luteum rupture may be indicative of the presence of an

intrauterine pregnancy. Therefore, a ruptured corpus luteum cyst rupture should be considered even in the presence of a positive pregnancy test^[7]. Various imaging modalities play an important role in diagnosing the ruptured corpus luteum cyst.

USG : In ruptured corpus luteal cyst USG may reveal a complex cyst, with a rim of increased echogenicity surrounding the cystic component in the adnexal area, associated with free hypoechoic fluid in the peritoneal cavity (haemoperitonium). Free hypoechoic fluid may contain focal collections of higher echogenicity (e.g., clotted blood) in the pelvis . Doppler USG may demonstrate the vascularized wall^[4,5,6,7,8,9,10].

CONCLUSION:

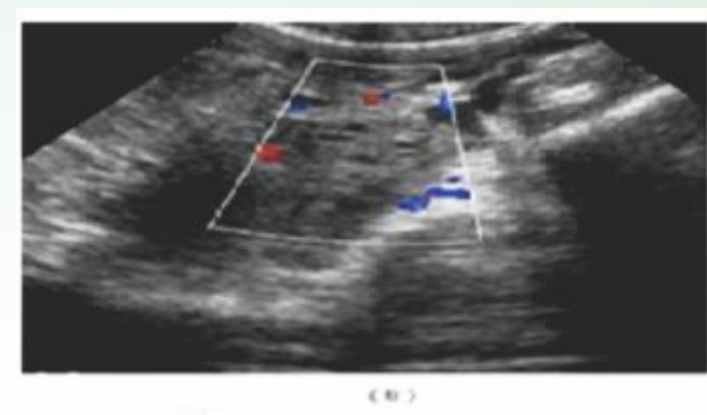
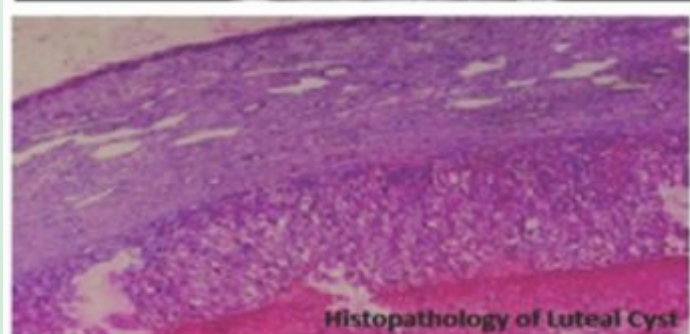
Luteal cyst is an emergency condition with such a life threatening differential diagnosis i.e ectopic pregnancy. So is the reason all three clinical, pathological and radiological details to be taken in account to diagnose and treat the emergency .One should also be Luteal cyst minded to diagnose and treat the grave emergency.

Images :

Image a & b: Doppler view of Luteal cyst

Image c: Free Fluid in peritoneal cavity

Image d: Histopathology on Luteal cyst



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